From: <CHARLES_LANG@micnet.micusa.com>
To: <FR0001@ustr.gov>
Date: Tue, Nov 13, 2001 12:21 PM
Subject: Exclusion request: Next Generation Corrosion Resistance SteelStrip for Battery Cell Containers

To USTR,

The following items are all in developmental stages at U.S. battery manufacturers and ungergoing initial developmental stage testing. If successful, one or multiple coatings listed below will become the next generation of plated steel sheet and indispensible for U.S. manufactured disposable and rechargeable batteries. We kindly ask that you grant exclusion of these corrosion resistant steel strip uniquely produced for the next generation of battery cell containers.

Product 1
A. Diffusion Anealed Tin-Nickel plated carbon steel sheet for battery cell containers.

B. Product Description - Diffusion annealed Tin (Sn) plated Nickel (Ni) plated carbon steel strip with a cold rolled or tin mill black plate base metal conforming to the chemical requirements based on AISI 1006. Both sides of the cold rolled strip shall initially be electrolyitically plated with natural nickel. The material is then annealed to create a diffusion of the Nickel and the Iron substrate. Then an additional layer of natural Tin is electrolytically plated on the top side of the nickel plated steel strip and then annealed to create a diffusion of the Nickel and Tin alloys.

The tin-nickel, nickel plated material must be sufficiently ductile and adherent to the substrate to permit forming without cracking, flaking, peeling, or any other evidence of separation.

Coating thickness:
Top side: Nickel (Ni) - Tin (Sn) layer together >= 1.0 micron meters
Tin (Sn) layer alone > = 0.05 micron meters
Bottom side: Nickel (Ni) layer > = 1.0 micron meters

C. Basis for request for exclusion - The material is not produced by any U.S. domestic mill source ane protected by an international patent.

D.Name / Location of U.S. or foreign producer: Toyo Kohan Co., Ltd., Japan.

E. Total U.S. consumption of Product 1:
1996-2000 = (0) zero
Value
1996-2000 = (0) zero
Projection
2001 = (0); 2002 = 200; 2003 5,000; 2004 = 5,000
* figures based on 10 % of U.S. battery makers consumption for alkaline battery use. Projections can not be easily determined as the product is considered next generations of corrosions resistant steel sheet for battery

cells and actual consumpption depends on battery makers introduction.

F. Total U.S. production = (0) zero
G. U.S. produced substitute = (0) zero

Product 2

A. Nickel plated diffusion anealed tin-nickel plated carbon steel sheet for battery cell containers.

B. Product Description - Natural nickel (Ni) is electrolytically plated to the top side
of the diffusion annealed Tin-Nickel plated carbon steel strip with a cold rolled or
tin mill black plate base metal conforming to the chemical requirements based on AISI 1006. Both sides of the cold rolled strip shall initially be electrolyitically plated with natural nickel (Ni). Then only the top side of the
nickel plated strip is electrolytically plated with Tin (Sn) and then annealed to create a diffusion between the Nickel and Tin layers in which a Ni-Sn alloy is created. Then an additional layer of natural Nickel is electrolytically plated on the top side of the strip over the Nickel-Tin alloy .

The nickel-tin-nickel alloy material must be sufficiently ductile and adherent to the substrate to permit forming without cracking, flaking, peeling, or any other evidence of separation.

Coating thickness:
Top side: Nickel-Tin-Nickel combination layer >= 1.0 micron meters
Tin layer only > = 0.05 micron meters
Bottom side: Nickel (Ni) layer >= 1.0 micron meters

C. Basis for request for exclusion - The material is not produced by any U.S. domestic mill source and protected by an international patent.

D.Name / Location of U.S. or foreign producer: Toyo Kohan Co., Ltd., Japan.

E. Total U.S. consumption of Product 2:
1996-2000 = (0) zero
Value
1996-2000 = (0) zero
Projection
2001 = (0); 2002 = 200; 2003 5,000; 2004 = 5,000
** figures based on 10 % of U.S. battery makers consumption for alkaline battery use. Projections can not be easily determined as the product is considered next generations of corrosions resistant steel sheet for battery cells and actual consumpption depends on battery makers introduction.
F. Total U.S. production = (0) zero
G. U.S. produced substitute = (0) zero

Product 3

A. Nickel-Graphite plated diffusion anealed Tin-Nickel plated carbon

steel sheet for battery cell containers.

B. Product Description - A natural composition mixture of Nickel (Ni) and Graphite (G) is electrolytically plated to the top side of the diffusion annealed
Tin-Nickel plated carbon steel strip with a cold rolled or tin mill black plate
base metal conforming to the chemical requirements
based on AISI 1006. Both sides of the cold rolled strip shall initially be electrolyitically plated with natural nickel (Ni). Then only the top side of the
nickel plated strip is electrolytically plated with Tin (Sn) and then annealed to create a diffusion between the Nickel and Tin layers in which a Ni-Sn alloy is created. Then an additional layer of a mixture of natural Nickel and Graphit
is electrolytically plated on the top side of the strip over the Nickel-Tin alloy .

Coating thickness:
Top side: Nickel-Graphite, Tin-Nickel layer >= 1.0 micron meters
Tin layer only > = 0.05 micron meters
Nickel Graphite layer only > 0.2 micron meters
Bottom side: Nickel layer >= 1.0 micron meters

C. Basis for request for exclusion - The material is not produced by any U.S. domestic mill source and protected by an international patent.

D.Name / Location of U.S. or foreign producer: Toyo Kohan Co., Ltd., Japan.

E. Total U.S. consumption of Product 3:
1996-2000 = (0) zero
Value
1996-2000 = (0) zero
Projection
2001 = (0); 2002 = 200; 2003 5,000; 2004 = 5,000
** figures based on 10 % of U.S. battery makers consumption for alkaline battery use. Projections can not be easily determined as the product is considered next generations of corrosions resistant steel sheet for battery cells and actual consumpption depends on battery makers introduction.
F. Total U.S. production = (0) zero
G. U.S. produced substitute = (0) zero

Product 4
A. Nickel-Graphite plated diffusion annealed Nickel plated carbon steel sheet for
battery cell containers.

B. Product Description - A natural composition mixture of Nickel (Ni) and Graphite (G) is electrolytically plated to the top side of the diffusion annealed
nickel plated steel strip with a cold rolled or tin mill black plate base metal
conforming to the chemical requirements based on AISI 1006.

Both sides of the cold rolled strip shall initially be electrolyitically plated with natural nickel. The material is then annealed to create a diffusion of the Nickel and the Iron substrate. Then an additional layer of natural Nickle-graphite
is electrolytically plated on the top side of the nickel plated steel strip.

The Nickel-Graphite , nickel plated material must be sufficiently ductile and adherent to the substrate to permit forming without cracking, flaking, peeling, or any other evidence of separation.

Coating thickness:
Top side: Nickel-Graphite-Nickel Layer >= 1.0 micron meters
Nicke-graphite Layer >= 0.5 micron meters
Bottom side: Nickel (Ni) layer >= 1.0 micron meter

C. Basis for request for exclusion - The material is not produced by any U.S. domestic mill source and protected by an international patent.

D.Name / Location of U.S. or foreign producer: Toyo Kohan Co., Ltd., Japan.

E. Total U.S. consumption of Product 4 :
1996-2000 = (0) zero
Value
1996-2000 = (0) zero
Projection
2001 = (0); 2002 = 200; 2003 5,000; 2004 = 5,000
* figures based on 10 % of U.S. battery makers consumption for alkaline battery use. Projections can not be easily determined as the product is considered next generations of corrosions resistant steel sheet for battery cells and actual consumpption depends on battery makers introduction.
F. Total U.S. production = (0) zero
G. U.S. produced substitute = (0) zero

Product 5
A. Diffusion Anealed Nickel-Graphite plated carbon steel sheet for battery cell containers.

B. Product Description - Diffusion annealed Nickel Graphite plated steel strip with a cold rolled or tin mill black plate base metal conforming to the chemical requirements based on AISI 1006. The bottom side of the cold rolled strip shall be electrolyitically plated with natural nickel. The top side of the strip is then plated with a Nickel-Graphite composition. The strip is then annealed to create a diffusion of the Nickel and the Iron substrate on the bottom side a diffusion of the Nickel-Graphite and the Iron substrate.

The Nickel-Graphite and Nickel plated material must be sufficiently ductile and adherent to the substrate to permit forming without cracking, flaking, peeling, or any other evidence of separation.

Coating thickness:
Top side: Nickel-Graphite layer > = 1.0 micron meters

Bottom side: Nickel (Ni) layer >= 1.0 micron meters

C. Basis for request for exclusion - The material is not produced by any U.S. domestic mill source and protected by an international patent.

D.Name / Location of U.S. or foreign producer: Toyo Kohan Co., Ltd., Japan.

E. Total U.S. consumption of Product 5:
1996-2000 = (0) zero
Value
1996-2000 = (0) zero
Projection
2001 = (0); 2002 = 200; 2003 5,000; 2004 = 5,000
** figures based on 10 % of U.S. battery makers consumption for alkaline battery use. Projections can not be easily determined as the product is considered next generations of corrosions resistant steel sheet for battery cells and actual consumpption depends on battery makers introduction.
F. Total U.S. production = (0) zero
G. U.S. produced substitute = (0) zero

Product 6
A. Nickel(Ni)-Phosphorus(P) plated diffusion annealed Nickel plated carbon steel sheet for battery cell containers.

B. Product Description - A natural composition mixture of Nickel (Ni) and Phosphorus (P) is electrolytically plated to the top side of the diffusion annealed
nickel plated steel strip with a cold rolled or tin mill black plate base metal
conforming to the chemical requirements based on AISI 1006.
Both sides of the cold rolled strip shall initially be electrolyitically plated with natural nickel. The material is then annealed to create a diffusion of the Nickel and the Iron substrate. Then another layer of natural Nickle-phosphorus is electrolytically plated on the top side of the nickel plated steel strip.

The nickel-phosphorus, nickel plated material must be sufficiently ductile and adherent to the substrate to permit forming without cracking, flaking, peeling, or any other evidence of separation.

Coating thickness:
Top side: Nickel-phosphorus, nickel layer >= 1.0 micron meters
Nickel-phosphorus layer >= 0.1 micron meters
Bottom side: Nickel (Ni) layer >= 1.0 micron meters

C. Basis for request for exclusion - The material is not produced by any U.S. domestic mill source and protected by an international patent.

D.Name / Location of U.S. or foreign producer: Toyo Kohan Co., Ltd., Japan.

E. Total U.S. consumption of Product 6:
1996-2000 = (0) zero
Value
1996-2000 = (0) zero

Projection
2001 = (0); 2002 = 200; 2003 5,000; 2004 = 5,000

* figures based on 10 % of U.S. battery makers consumption for alkaline battery use. Projections can not be easily determined as the product is considered next generations of corrosions resistant steel sheet for battery cells and actual consumpption depends on battery makers introduction.

F. Total U.S. production = (0) zero
G. U.S. produced substitute = (0) zero

Respectfully Submitted,

Charles Lang Jr.
Mitsubishi International Steel Inc.
International Steel Sheet Trade Div.
6250 N. River Rd.
Ste. 2055
Rosemont, IL. 60018
Tel: 847-685-5428
Fax : 847-685-5420
E-mail: charles_lang@micusa.com